



AMENDMENTS TO THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as is shown below. This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) An air conditioner comprising:

a compressor;

an accumulator on an inlet side of the compressor ~~for introduction of only gas refrigerant into the compressor;~~

an outdoor heat exchanger for exchanging ~~heat-exchanging~~ between the refrigerant and exterior air;

at least one ~~an~~ indoor unit having an expansion valve and an indoor heat exchanger for exchanging heat ~~making heat-exchange~~ between the refrigerant and room air, ~~and an expansion valve;~~ and

a ~~sheath~~ heater in the accumulator for heating the refrigerant during a room heating mode to delay in room heating for delaying deposition of frost on the outdoor heat exchanger.

2. (Currently Amended) The air conditioner as claimed in claim 1, wherein the ~~sheath~~ heater includes;

a coil formed heat generating part, and

two electrodes connected to the heat generating part for supplying power.

3. (Currently Amended) The air conditioner as claimed in claim 2, wherein the two electrodes are waterproof treated for preventing the two-electrode electrodes from coming into contact with moisture from the outdoor heat exchanger, ~~or the like.~~

4. (Currently Amended) The air conditioner as claimed in claim 1, wherein the ~~sheath~~ heater is formed of copper pipe.

5. (Currently Amended) The air conditioner as claimed in claim 1, wherein ~~there are a plurality of~~ the at least one indoor unit comprises a plurality of indoor units.

6. (Currently Amended) A method for controlling operation of an air conditioner comprising ~~the steps of:~~

~~refrigerant from a compressor passing through, and heat exchanging with room air at, an indoor heat exchanger;~~

~~the heat exchanged refrigerant passing through, and expanding at, an expansion valve;~~

~~the expanded refrigerant passing through, and heat exchanging with exterior air at, an outdoor heat exchanger, to become low temperature refrigerant;~~

~~heating the low temperature refrigerant with a sheath heater in an accumulator~~ during a room heating mode to delay ~~for delaying growth of frost on the an outdoor heat exchanger in room heating; and~~

varying a heat generating rate of the ~~sheath~~ heater with an exterior temperature.

7. (Currently Amended) The method as claimed in claim 6, wherein the ~~step of varying a heat generating rate of the sheath heater includes the steps of;~~ comprises:

increasing the heat generating rate of the ~~sheath~~ heater ~~if~~ when the exterior temperature is lower than a reference temperature taken as the exterior temperature at which deposition of frost on the outdoor heat exchanger starts, and

turning off the ~~sheath~~ heater ~~in a case~~ when the exterior temperature exceeds the reference temperature.

8. (Original) The method as claimed in claim 7, wherein the exterior temperature is divided into a plurality of temperature sections.

9. (Currently Amended) The method as claimed in claim 8, wherein the heat generating rates of the ~~sheath~~ heater are determined ~~proper~~ according to respective temperature sections by experiment.

10. (Currently Amended) The method as claimed in claim 6, wherein the ~~sheath~~ heater includes;

a coil formed heat generating part, and

two electrodes connected to the heat generating part for supplying power.

11. (Currently Amended) The method as claimed in claim 10, wherein the two electrodes are waterproof treated for preventing the two ~~electrode~~ electrodes

from coming into contact with moisture from the outdoor heat exchanger, ~~or the~~
like.

12. (Currently Amended) The method as claimed in claim 6, wherein the
sheath heater is formed of copper pipe.

13. (Currently Amended) A method for controlling operation of an air
conditioner comprising ~~the steps of:~~

~~refrigerant from a compressor passing through, and heat exchanging with~~
~~room air and expanding at, a plurality of indoor units each having an indoor heat~~
~~exchanger and an expansion valve;~~

~~the expanded refrigerant passing through, and heat exchanging with~~
~~exterior air at, an outdoor heat exchanger, to become low temperature~~
refrigerant;

heating the low temperature refrigerant with a sheath heater in an
accumulator during a room heating mode to delay ~~for delaying~~ growth of frost on
the an outdoor heat exchanger ~~in room heating~~; and

varying a heat generating rate of the sheath heater with a capacity of the a
plurality of indoor unit units.

14. (Currently Amended) The method as claimed in claim 13, wherein the
~~step of varying a~~ the heat generating rate of the sheath heater ~~includes the steps~~
~~of; comprises:~~

increasing the heat generating rate of the sheath heater ~~if~~ when the
capacity of the indoor unit required in room heating is greater than a reference

capacity taken as the capacity of the indoor unit having the smallest capacity of the indoor units, and

turning off the ~~sheath heater in a case~~ when the capacities of the indoor units ~~is~~ are lower than the reference capacity.

15. (Original) The method as claimed in claim 14, wherein the capacity of the indoor unit required in room heating is divided into a plurality of sections.

16. (Currently Amended) The method as claimed in claim 15, wherein the heat generating rates of the ~~sheath heater~~ are determined ~~proper~~ according to respective sections by experiment.

17. (Currently Amended) The method as claimed in claim 13, wherein the ~~sheath heater~~ includes;

a coil formed heat generating part, and

two electrodes connected to the heat generating part for supplying power.

18. (Currently Amended) The method as claimed in claim 17, wherein the two electrodes are waterproof treated for preventing the two ~~electrode~~ electrodes from coming into contact with moisture from the outdoor heat exchanger, ~~or the~~ like.

19. (Currently Amended) The method as claimed in claim 13, wherein the ~~sheath heater~~ is formed of copper pipe.

20. (Currently Amended) The method as claimed in claim 13, further comprising:

determining wherein the heat generating rate of the sheath heater is determined, taking an exterior temperature into account, additionally.

21. (New) The air conditioner as claimed in claim 1, wherein the heater is configured to be operated when the exterior temperature is lower than a reference temperature taken as the exterior temperature at which deposition of frost on the outdoor heat exchanger starts, and to be stopped when the exterior temperature exceeds the reference temperature.